Seat No. 6176

QP-4614

Total No. of Pages : 3

MAR_APR 2025 SUMMER EXAMINATION

11949 Bachelor of Computer Application(BCAsci) NEP 2.0

Sub. Name: IT Security

Sub. Code: 110995/110739/96655

Day and Date: APRIL ,26-04-2025 **Total Marks:** 80

Time: 02:30 PM To 05:30 PM

Instructions: 1. Figures to the right indicate full marks

Special Inst.: 1) Que.1 and Que. 8 are compulsory.
2) Attempt any three Questions from Que. No.2 to Que. No. 7.

Q1) Multiple Choice Questions (12 questions for 1 mark each) [12]

i. What does IT Security primarily aim to protect?
- A. Only hardware
- B. Only software
- C. Information and assets
- D. Only networks

ii. Which of the following is a logical asset in IT security?
- A. Server
- B. Switch
- C. Software
- D. Printer

iii. What is the main purpose of ensuring confidentiality in IT Security?
- A. Ensure systems work continuously
- B. Ensure only authorized users access data
- C. Ensure data is accurate
- D. Ensure backups exist

iv. Why is IT security becoming more significant today?
- A. Decrease in the number of users
- B. Increase in paper records
- C. Rise in cyber threats and digital dependency
- D. Reduction in hardware cost

v. Which of the following is an example of a passive attack?
- A. Phishing
- B. Sniffing
- C. Eavesdropping
- D. Denial of Service

vi. What type of attack involves sending fraudulent emails to trick users into revealing sensitive information?
A. Spoofing
B. Phishing
C. Sniffing
D. Spamming

vii. Which of the following is NOT a source of security threats?
A. Hackers
B. Software updates
C. User errors
D. Environmental hazards

viii. A worm differs from a virus in that it:
A. Needs a host program
B. Cannot replicate
C. Spreads without user intervention
D. Is always harmless

ix. Which security control detects and blocks suspicious network activity in real-time?
A. Firewall
B. Intrusion Detection System (IDS)
C. Intrusion Prevention System (IPS)
D. Antivirus

x. What does a firewall primarily protect against?
A. Physical damage
B. Unauthorized network access
C. Biometric failure
D. Data formatting errors

xi. Cyber security standards help organizations to:
A. Replace all software
B. Improve internet speed
C. Protect systems and data from cyber threats
D. Design websites

xii. Which of the following is a challenge in enforcing IT laws?
A. Rapidly evolving technologies
B. Physical infrastructure cost
C. Employee punctuality
D. Software development process

Q2) Explain in detail the basic concepts of Information System Security. Discuss its need, significance, and current challenges faced by organizations. [16]

Q3) Classify IT assets into Physical and Logical categories. Explain each with at least three examples. [16]

Q4) Explain different types of security threats with suitable examples. Categorize them into cyber threats and physical threats. [16]

Q5) Discuss the techniques used in phishing, spoofing, and denial-of-service attacks. What preventive measures should be taken? [16]

Q6) Describe various access control mechanisms used in IT security. [16]

Q7) Discuss in detail the features of the Information Technology Act 2000, the need for its amendments, and its relevance in today's digital environment. [16]

Q8) Write notes on (Any Four out of Six) [20]

a. Information security dimensions [5]

b. Malicious Code [5]

c. Types of Cryptography [5]

d. Digital signature and certificate [5]

e. IS Audit [5]

f. Types of cyber crimes [5]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -
This Question Paper may be distributed for following Subjects as common code.
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1] (717) Bachelor of Computer Application (110995) IT Security Part 3 SEM 6
2] (7810) B.C.A. (CBCS) (110739) IT Security Part 3 SEM 6
3] (7824) Bachelor of Computer Application (CBCS)NEP (96655) IT Security Part 3 SEM 6